

Penn Cambria Curriculum

Course Name	Digital Photography and Audio (Digital Media Part B)
Length of Course	.5 credits / 1 days per week for one quarter
Grade Level	9-12
Prerequisites	none
Course Description	<p>Through this course, the students will be able to operate a digital camera, set up different camera shots, edit photographs, and organize their photos. Students also will be able to record audio, edit audio, create a script, and convert their recordings to mp3 and other formats. The students will take, edit, arrange and enhance photographs as well as add effects. The students will script and create audio commercials for products, and produce their own short radio drama, create sound effects, and manipulate audio to sound differently than the original recording.</p> <p>This course may be combined with Digital Video for a full credit elective (Digital Media).</p>
Units of Study	<p>Design Concepts Image resolution, file size, and file formats Using a Digital Camera Editing Digital Images Recording Audio Editing Audio Podcasting, Commercials, and Radio Drama</p>
Materials	<p>Text: None</p> <p>Supplemental Materials: Internet connection, camera, templates for scripting, Picasa, Gimp, Audacity software.</p>

Standard Alignment:

PA Academic Standards for Business, Computer and Information Technology (2012)

15.3.12. T – Demonstrate application of digital citizenship in work and personal situations.

15.4.12. A – Apply the creative and productive use of emerging technologies for educational and personal success.

15.4.12. G – Create an advanced digital project using sophisticated design and appropriate software/ applications.

PA Academic Standards for Reading and Writing in Science and Technology (draft 8/6/12)

CC.3.5.11-12. D – Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.

CC.3.5.11-12. G – Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

CC.3.6.11-12. C – Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

CC.3.6.11-12. I – Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single setting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Unit: Design Concepts

Estimated Time: 4 days

Curricular Objectives:

- Describe and apply the elements of design to create effective composition.
- Describe and apply color theory & typography principles as they relate to media design.
- Examine how visual images are used to convey meaning.

Assessments/ Measurement of Objectives:

Classroom /homework activities based on objectives
Student created projects

Suggested Methods of Instruction / Learning Activities:

Practice exercises
Direct instruction
Use of video and other online tutorials
Reading and Writing to Learn activities

Unit: Image Resolution, File Size, and File Formats

Estimated Time: 2 days

Curricular Objectives:

- Describe resolution and the impact of resolution on image quality
- Identify and work with various image file formats
- Demonstrate the ability to convert file formats as necessary and appropriate

Assessments/ Measurement of Objectives:

Classroom /homework activities based on objectives
Student created projects

Suggested Methods of Instruction / Learning Activities:

Practice exercises
Direct instruction
Use of video and other online tutorials
Reading and Writing to Learn activities

Unit: Using a Digital Camera

Estimated Time: 6 days

Curricular Objectives:

- Use a digital camera to capture photographs
- Describe and use properly the different photography modes of a digital camera
- Download images from a digital camera to computers
- Compose photographs effectively using all five composition techniques learned
- Use software tools to create albums and collages, edit photos, and organize photos (ex: Picasa)
- Use photo editing software (ex: Picnik, Gimp)
- Create a photo movie

Assessments/ Measurement of Objectives:

Classroom /homework activities based on objectives

Student created projects

Suggested Methods of Instruction / Learning Activities:

Practice exercises

Direct instruction

Use of video and other online tutorials

Reading and Writing to Learn activities

Unit: Editing Digital Images

Estimated Time: 5 days

Curricular Objectives:

- Apply basic editing techniques such as cropping, fixing redevye, adding shadows, changing brightness and contrast
- Change resolution of an image
- Select specific parts of an image
- Create layers within an image
- Manipulate layers to enhance, change, and/or improve an image
- Acquire knowledge of and apply specific filters to images using editing software (ex: Gimp)
- Using specific editing tools and techniques, improve the appearance of an image by correcting flaws in the image

Assessments/ Measurement of Objectives:

Classroom /homework activities based on objectives

Student created projects

Suggested Methods of Instruction / Learning Activities:

Practice exercises

Direct instruction

Use of video and other online tutorials

Reading and Writing to Learn activities

Unit: Recording Audio

Estimated Time: 5 days

Curricular Objectives:

- Use proper settings in recording software
- Record voice and other sounds properly
- Operate a microphone correctly
- Save and play back recordings in mp3 format

Assessments/ Measurement of Objectives:

Classroom /homework activities based on objectives

Student created projects

Suggested Methods of Instruction / Learning Activities:

Practice exercises

Direct instruction

Use of video and other online tutorials

Reading and Writing to Learn activities

Unit: Editing Audio

Estimated Time: 11 days

Curricular Objectives:

- Remove from and add sound to an existing recording
- Combine different recordings into one
- Add tracks to a recording to create different layers
- Add sound effects to a recording
- Manipulate the level of a recording at different parts of the recording

Assessments/ Measurement of Objectives:

Classroom /homework activities based on objectives

Student created projects

Suggested Methods of Instruction / Learning Activities:

Practice exercises

Direct instruction

Use of video and other online tutorials

Reading and Writing to Learn activities

Unit: Podcasting, Commercials and Radio Drama
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Estimated Time: 12 days

Curricular Objectives:

- Create a properly formatted script using a template
- Record multiple voices together
- Acquire or create proper sound effects
- Create recording that adheres to a specific time allotment
- Write a script for a podcast, product commercial, and radio drama

Assessments/ Measurement of Objectives:

Classroom /homework activities based on objectives

Student created projects

Narrative writing

Suggested Methods of Instruction / Learning Activities:

Practice exercises

Direct instruction

Use of video and other online tutorials